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Esben Rotboll

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EXAMINER

PICO, ERIC E

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/644,188	Applicant(s) ROTBOLL ET AL.	
	Examiner ERIC PICO	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim(s) 10 and 15 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Rivera et al. U.S. Patent No. 6095288.

3. **Regarding claim 10**, Rivera et al. further discloses a lift for installation in a building comprising a flat floor plate with an underside and an upper side; at least one lift cage comprising a three-dimensional body 12 for receiving persons or articles to be conveyed and a support body 16 for accepting forces arising during conveying of the persons or articles; and a lift shaft, referred to as hoistway 26, extending above the floor plate, the lift shaft 26 having a life shaft base, referred to as floor 24, having an underside lying at the same level as the underside of the floor plate and an upper surface lying at a level above the underside of the floor plate and below the upper side of the floor plate, shown in Figures 1-4.

4. **Regarding claim 15**, Rivera et al. discloses a lift cage, comprising a three-dimensional body, referred to as elevator car 12, for receiving persons or articles to be conveyed and a support body, referred to as intermediary frame 16, from which the three-dimensional body is suspended, the three-dimensional body comprising a floor

Art Unit: 3654

member, the support body 16 comprising two vertically extending rectangular open side frames, shown as the side elements of intermediary frame 16 and elements extending between the intermediary frame 16 and guide rails 14, at opposed sides of the lift cage, each side frame having front and rear vertical members joined by upper and lower horizontal members, shown as portion of the intermediary frame 16 that extends between the intermediary frame 16 and guide rails 14, the side frames being connected together by way of a horizontal top frame, the side frames and the top frame forming an inverted U-shape construction with an open bottom, shown when viewed from the top of the shaft, the three-dimensional body 12 being positioned between the side frames and suspended from the top frame, shown in Figure 1 and 2.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim(s) 1, 2, 14, and 16** is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivera et al. U.S. Patent No. 6095288 in view of Tomasetti et al. U.S. Patent No. 6209686.

7. **Regarding claim 1**, Rivera et al. discloses a lift cage comprising a three-dimensional body, referred to as elevator car 12, for receiving persons or articles to be conveyed and suspended in a support body, referred to as intermediary frame 16, the

three-dimensional body 12 comprising at least one floor member, the support body 16 forming an inverted U-shaped frame having an open bottom, shown when viewed from the top of the shaft, and comprising two vertically-extending side frames, shown as the side elements of intermediary frame 16 and elements extending between the intermediary frame 16 and guide rails 14, arranged at opposed sides of the lift cage, the lift cage being positioned between the side frames, the side frames being connected together by way of a top frame, shown as the top element of intermediary frame 16 and elements extending between the intermediary frame 16 and guide rails 14, the three-dimensional body 12 being suspended from the top frame.

8. Rivera et al. is silent concerning the support body forming an inverted vertically-extending U-shaped frame having an open bottom.

9. Tomasetti et al. teaches a lift cage comprising a three-dimensional body, referred to as the enclosure of the elevator car, for receiving persons or articles to be conveyed and suspended in a support body 3-6, the three-dimensional body comprising at least one floor member 30, 31, the support body 3-6 forming an inverted vertically-extending U-shaped frame having an open bottom and comprising two vertically-extending side frames 3, 4 arranged at opposed sides of the lift cage, the lift cage being positioned between the side frames 3, 4, the side frames 3, 4 being connected together by way of a horizontal top frame 5, 6 extending across the three-dimensional body.

10. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the support body disclosed by Rivera et al. into an inverted vertically-

extending U-shaped frame having an open bottom as taught by Tomasetti et al. to facilitate the support of the three-dimensional body.

11. **Regarding claim 2 and 16**, Rivera et al. is silent concerning the lift cage not including any component extending below a lower surface of the floor member of the three-dimensional body.

12. Tomasetti et al. teaches a lift cage, referred to as car structure 1, not including any component extending below a lower surface of the floor member, referred to as supporting structure 2, of the three-dimensional body, comprised of wall elements 27-29.

13. It would have been obvious to one of ordinary skill in the art at the time of the invention to not include any component as taught by Tomasetti et al. extending below a lower surface of the floor member of the three-dimensional body disclosed Rivera et al. to accommodate elevator pit constraints.

14. **Regarding claim 14**, Rivera et al. discloses a lift cage mounted in a lift shaft, which lift cage comprises a three-dimensional cage, referred to as elevator car 12, for receiving persons or articles to be conveyed and a support body, referred to intermediary frame 16, the three-dimensional cage comprising a floor member, shown in Figures 1 and 2;

15. two side frames, shown in Figures 1 and 2 attached to guide rails 14, of the support body 16 positioned on a lift shaft base referred to as floor 24, the side frames being disposed vertically and parallel to one another at a spacing of a width of a top frame, shown in Figures 1 and 2 attached to elevator rope 32, of the support body 16,

each side frame bearing against a guide rail 14 by way of a guide shoe, shown in Figure 1 and 2;

16. the top frame horizontally fastened to a conveying cable, referred to as elevator rope 32, of a lift drive;

17. the top frame connected to both side frames to form an inverted U-shaped frame with an open bottom, when viewed from the top of the shaft;

18. the three-dimensional cage attached to the top frame via the side frames whereby the three-dimensional body is suspended from the top frame.

19. Rivera et al. is silent concerning the top frame connected to both side frames to form an inverted vertically-extending U-shaped frame with an open bottom.

20. Tomasetti et al. teaches a lift cage in a lift shaft, which lift cage comprises a three-dimensional cage, referred to as the enclosure of the elevator car, for receiving persons or articles to be conveyed and a support body, the three-dimensional cage comprising at least one floor member 30, 31,

21. two side frames 3, 4 of the support body, the side frames 3, 4 being disposed vertically and parallel to one another at a spacing of a width of a top frame 5, 6 of the support body, each side frame 3, 4 bearing against a guide rail by way of a guide shoe 7, 8, 9.1, 10.1;

22. the top frame 5, 6 connected to both side frames 3, 4 to form an inverted vertically-extending U-shaped frame with an open bottom; and

23. the three-dimensional cage attached to the top frame 5, 6, the top frame 5, 6 extending across the three-dimensional body.

24. It would have been obvious to one of ordinary skill in the art at the time of the invention to connect the top frame to both side frames disclosed by Rivera et al. to form an inverted vertically-extending U-shaped frame with an open bottom as taught by Tomasetti et al. to facilitate the support of the three-dimensional body.

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the steps of positioning two side frames of the support body on a lift shaft base, fastening the top frame to a conveying cable of a lift drive, raising the top frame by means of the lift drive to a fastening level between the side frames, connecting the top frame to both side frames, and attaching the three-dimensional cage to the top frame because these steps would result from the mounting of the device disclosed by Rivera et al. in its normal and expected fashion.

26. **Claim(s) 4-6** is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivera et al. U.S. Patent No. 6095288 in view of Tomasetti et al. U.S. Patent No. 6209686 as applied to claims 1 and 2 above, and further in view of Halpern GB Publication No. 2139183.

27. **Regarding claim 4**, Rivera et al. is silent concerning the three-dimensional body comprises at least one structural member.

28. Halpern teaches a three-dimensional body, referred to as framework 10, comprised of structural members, referred to as corner posts 32, 42.

29. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the three-dimensional body disclosed by Rivera et al. with structural members as taught by Halpern to maintain a rigid three-dimensional body.

30. **Regarding claim 5**, Rivera et al. is silent concerning the three-dimensional body comprises at least one structural member being a flat profile element.

31. Halpern teaches structural members 32, 42 being a flat profile element.

32. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the three-dimensional body disclosed by Rivera et al. with structural members of a flat profile element as taught by Halpern to maintain a rigid three-dimensional body.

33. **Regarding claim 6**, Rivera et al. is silent concerning the three-dimensional body comprises at least one structural member mounted outside the three-dimensional body.

34. Halpern teaches structural members 32, 42 mounted outside the three-dimensional body.

35. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the three-dimensional body disclosed by Rivera et al. with structural members mounted outside a three-dimensional body as taught by Halpern to maintain a rigid three-dimensional body.

36. **Claim(s) 4, and 6-9** is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivera et al. U.S. Patent No. 6095288 in view of Tomasetti et al. U.S. Patent No. 6209686 as applied to claims 1 and 2 above, and further in view of Ericson et al. U.S. Patent No. 5564529.

37. **Regarding claim 4**, Rivera et al. is silent concerning the three-dimensional body comprises at least one structural member.

Art Unit: 3654

38. Ericson et al. teaches a three-dimensional body, referred to as cab 32, comprises structural members, referred to as vertical support 86.

39. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the three-dimensional body disclosed by Rivera et al. with structural members as taught by Ericson et al. to maintain a rigid three-dimensional body.

40. **Regarding claim 6**, Rivera et al. is silent concerning the three-dimensional body comprises a structural member mounted outside the three-dimensional body.

41. Ericson et al. teaches the structural member 86 is mounted outside the three-dimensional body 32.

42. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the three-dimensional body disclosed by Rivera et al. with structural members mounted outside a three-dimensional body as taught by Ericson et al. to maintain a rigid three-dimensional body.

43. **Regarding claim 7**, Rivera et al. is silent concerning the three-dimensional body comprises a structural member mechanically connecting the floor member and the roof member together.

44. Ericson et al. teaches the structural member 86 mechanically connects a floor member, referred to as platform 46, and a roof member, referred to as horizontal supports 82, together.

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the three-dimensional body disclosed by Rivera et al. with structural

members that mechanically connects the floor member and the roof member together as taught by Ericson et al. to maintain a rigid three-dimensional body.

46. **Regarding claim 8**, Rivera et al. is silent concerning the three-dimensional body is suspended in the support body by way of the structural member.

47. Ericson et al. teaches the three-dimensional body 32 is suspended in a support body, referred to as car frame 28, by way of the structural member 86.

48. It would have been obvious to one of ordinary skill in the art at the time of the invention to suspend the three-dimensional body disclosed by Rivera et al. in a support body by way of structural members as taught by Ericson et al. to securely connect the three-dimensional body into the support body.

49. **Regarding claim 9**, Rivera et al. is silent concerning the three-dimensional body is suspended in the support body by way of the roof member.

50. Ericson et al. teaches the three-dimensional body 32 is suspended in a support body 28 by way of the roof member 82.

51. It would have been obvious to one of ordinary skill in the art at the time of the invention to suspend the three-dimensional body disclosed by Rivera et al. in a support body by way of a roof member as taught by Ericson et al. to securely connect the three-dimensional body into the support body.

Response to Arguments

52. Applicant's arguments filed 12/26/2007 have been fully considered but they are not persuasive.

53. In response to applicant's argument "the construction appearing to the right of the vertical dashed line is the floor plate. This is incorrect, as that portion includes both a "floor plate" as well as a "shaft base". They are shown as two different elements and it is improper for the Examiner to unilaterally re-define the metes and bounds of the elements" although shown as two elements the floor plate ends at hoistway 26 therefore the portion below floor plate is properly included as the floor plate.

54. In response to applicant's argument "Rivera et al. clearly does not have a flat floor plate; it is shown in Rivera Fig. 4 as having a depending portion" having a depending portion does not inhibit the floor plate from being flat.

Conclusion

55. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC PICO whose telephone number is (571)272-5589. The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP
/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3654